

Claims

1. An orthopaedic ratcheting forceps, especially for fixation of fractures, with two handles (2, 12), wherein a first catching element (5 or 35) is mounted pivotally with one handle (2 or 12), wherein a complementary catching element (26 or 37) is mounted on the other handle (12 or 2), wherein the catching elements (26, 27) can assume only two stable settings which can be switched with a single hand, one closed setting within which the jaws (4) of the forceps can only be further closed and an open setting within which the handles (2, 12) of the forceps are freely movable, so that the forceps can be opened as well as closed, characterised in that a spring means (28; 47) is provided in one handle (12), said spring means (28; 47) is biased between two mounting points, a lever end (25; 58; 49) connected with one of the catching elements (26; 37) engages the spring means (28; 47) and through movement of an activation element (32; 42; 49) the lever end (25; 49) is switchable between the closed setting and the open setting.
2. The forceps according to claim 1, wherein the activation element is the one handle (12) which is pivotable.
3. The forceps according to claim 1 or 2, wherein the spring means is a leaf spring (28) mounted within the one handle (12) or wherein the spring means is a part of said one handle (12) having a memory effect allowing for the two settings.
4. The forceps according to claim 3, wherein said spring (28) is mounted between abutting side walls (14, 24) within said handle (12).

5. The forceps according to claim 4, wherein said one handle (12) comprises two portions (22, 32) hinged together at a pivoting point (13), wherein said pivoting point is the second mounting point (13) of the spring (28) and wherein said spring (28) is confined between two, especially convex, side walls (14, 24) of the jaws portion (22) of the two portions (22, 32) and the prolongation of the fingerhole portion (32) of the two portions (22, 32) forms the lever end (25) and engages the leaf spring (28).

10

6. The forceps according to claim 5, wherein said first catching element is a rod (5) mounted pivotally on the other handle (2), the rod (5) extending through an opening (8) within the fingerhole portion (32) and having grooves (10) on the side directed towards the jaws (4) of the forceps and wherein the grooves (10) of the rod (5) can be engaged through the complementary catching element formed as a nose (26) extending from said fingerhole portion (32).

20 7. The forceps according to claim 6, wherein said rod (5) is prebiased in direction of the jaws (4) of the forceps through a spring (7) pushing the rod (5) in the direction of the grooves (10) on the side directed towards the jaws (4).

25 8. The forceps according to claim 1, wherein the second mounting point (57) is the point of engagement of the lever end (58) which can be switched between the two side walls (14, 24) of the first handle (12).

30 9. The forceps according to claim 8, wherein the catching elements (35) and the complementary catching elements (37) are curved elements wherein at least one catching element (35 or 37) has a changing radius of curvature, in order to provide, in the

closed setting - a blocking device upon contact of the surfaces (36) of the catching elements (35 and 37) against further movement in the direction of opening the forceps.

5 10. The forceps according to claim 1, wherein said first catching element is a rod (5) mounted pivotally on the other handle (2), the rod (5) extending through an opening (8) within the handle (12) and having grooves (50) on the side directed towards the jaws (4) of the forceps and wherein the grooves (50) of the
10 rod (5) can be engaged through the spring (47).

11. The forceps according to claim 10, wherein the complementary catching element (37) is part of the activation element (49) comprising the complementary catching elements (37) which can be
15 pushed inside said opening (8) within the handle (12) to disengage the spring (47) from the rod (5).